III. REMARKS

Claims 1-18 are pending in this application. By this Supplemental Amendment, claims 1, 10 and 13 have been amended. Reconsideration in view of the following remarks is respectfully requested.

Applicants appreciate the courtesies extended to Applicants' representative during the telephone interview of March 22, 2005. The subject matter of the interview is incorporated in the remarks that follow.

In the Office Action, claims 1, 2, 8-12 are rejected under 35 U.S.C. §103(a) as being unpatentable over Kanehira et al. (USPN 6,212,671 B1); claims 3 and 6 are rejected under 35 U.S.C. §103(a) as being unpatentable over Kanehira et al. in view of Chang et al. (USPN 6,370,579); and claims 4, 5, 7 and 13-18 are rejected under 35 U.S.C. §103(a) as being unpatentable over Kanehira et al. in view of Woodbright (USPN 5,640,497).
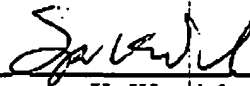
During the telephone interview, Applicants representative described a fundamental difference between the claimed invention and Kaneheira et al. In particular, Applicants representative described how the claimed invention relates to verifying a data preparation for an article such as a mask in terms of the layered design layers (i.e., the vertical orientation of design layers that make up the mask), while Kanaheira relates to designing a horizontal layout of a mask to ensure proper circuitry generation. Applicants explained that the data in Kanaheira is horizontal positional data for mask elements, which is typically not stated in an algorithmic fashion. In contrast, the layers that make up, for example, a mask can be stated in terms of an instruction algorithm, which is a definition of the article made up of mathematical functions of design layers. The claimed invention restates the instruction algorithm in terms of at least two fundamental algorithms, creates a graphical representation for each fundamental algorithm, combines the graphical representations to form a combined graphical representation, and

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then uses the combined graphical representation to determine whether a data preparation is correct for the article (e.g., mask) to be created in a layered fashion. Kanaheira et al. is not concerned with layers because it relates to formation of a mask pattern horizontally and corrects the mask pattern to ensure proper horizontal printing of circuit elements. The layers of the mask are never discussed in Kanaheira et al. Therefore, Kanehira et al. do not disclose or suggest, *inter alia*, "restating the instruction algorithm in terms of at least two fundamental algorithms" because of the nature of the data they are processing.

Applicants have revised claims 1, 10 and 13 to state that "each fundamental algorithm represent[s] at least one design layer of the plurality of design layers." Support for this recitation can be found in paragraph 24, *inter alia*, of the specification, where it is stated that "a fundamental algorithm may represent a single design layer definition or a compound design layer definition...." In view of the foregoing, Applicants submit that the application is in condition for allowance, and respectfully requests withdrawal of the rejection.

Applicants also respectfully submit that the application is in condition for allowance. Should the Examiner believe that anything further is necessary to place the application in better condition for allowance, he is requested to contact Applicants' undersigned attorney at the telephone number listed below.

Respectfully submitted,

Date: March 22, 2005

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